

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/910,902

REMARKS

Claims 1-9 are all the claims pending in the application. The specification has been amended to correct a section heading (there were two “Summary of the Invention” sections previously). The claims have been amended to resolve issues raised by the Examiner under 35 U.S.C. §112, second paragraph.

Entry of the above amendments is respectfully requested.

Rejection under 35 U.S.C. §112, Second Paragraph

On page 2 of the Office Action, claims 1-9 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

In response to this rejection, Applicants have amended the recitations of “polyethylene copolymer” to “copolymer of ethylene”, similar to the Examiner’s suggestion in this regard. With respect to claim 6, Applicants have clarified that it is the acrylate content that is more than 30%. Similarly, as to claim 7, Applicants have clarified that it is the acrylate content that is 10-35%.

Regarding the term “insulation extruder”, Applicants have amended this term to simply “extruder”.

In view of the above, Applicants submit that the present claims satisfy the requirements of 35 U.S.C. §112, second paragraph. Accordingly, withdrawal of this rejection is respectfully requested.

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Obviousness Rejection over Glander

On page 3 of the Office Action, claims 1-5, 8 and 9 are rejected under 35 U.S.C. §103 as being unpatentable over Glander et al (USP 4,289,860).

In response, Applicants note initially that U.S. Patent 4,289,860 (Glander) corresponds to Swiss Patent 618,450 discussed on page 1 of the present application.

Applicants submit that the EPDM- and EPM-rubbers are not at all copolymers in the sense of the present invention. These rubbers are added to the principal polymer so as to increase the melting viscosity thereof.

Further, Applicants submit that Glander is silent about the amount of copolymer (acrylate) in the insulating coating.

In view of the above, Applicants submit that the present invention is not obvious over Glander. Accordingly, withdrawal of this rejection is respectfully requested.

Obviousness Rejection over Furrer

On page 4 of the Office Action, claims 1-5, 8 and 9 are rejected under 35 U.S.C. §103 as being unpatentable over Furrer et al (USP 5,112,919).

In response, Applicants submit that U.S. Patent 5,112,919 (Furrer) discloses a process for producing a polymer cross linkable by exposure to moisture. A thermoplastic base polymer, a solid carrier polymer containing a silane and a free radical generator are blended, heated and mixed together at a temperature above the crystalline melting point of the base polymer.

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The crosslinking agent (silane) is incorporated in a solid carrier polymer, which is preferably a porous polymer so as to increase the amount of crosslinking agent in the polymer.

However, Applicants submit that Furrer does not describe that a **mixture** of a granular material is coated with the crosslinking agent and does not mention the amount of acrylate (copolymer) in the insulating coating.

Thus, Applicants submit that the present invention is not obvious over Furrer.

Accordingly, withdrawal of this rejection is respectfully requested.


Obviousness Rejection over JP 04293945 in view of Furrer

On page 5 of the Office Action, claims 1-9 are rejected under 35 U.S.C. §103 as being unpatentable over Nishiyama et al (JP -4293945) in view of Furrer.

In response, Applicants submit that JP '945 describes a silane-crosslinked **semiconducting** resin composition for power cable covering.

This composition is prepared by mixing and kneading a mixture of polyethylene, ethylene copolymers, an organo silane, and a highly electroconductive carbon black.

However, Applicants submit that this document does not disclose **granular** material which is coated with a crosslinking agent, as no crosslinking is mentioned. Further, there is no **insulating layer** in which the content of acrylate is between 1-8% by weight.

Therefore, Applicants respectfully submit that the present invention is not obvious over JP '945 in view of Furrer. Accordingly, withdrawal of this rejection is respectfully requested.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 1, the heading at line 3:

[Summary] Background of the Invention

IN THE CLAIMS:

The claims are amended as follows:

1. (Amended) A method for producing electrical cables coated with an insulated layer of cross-linked polyethylene, in which a polyethylene granulate is mixed with a liquid silane-containing cross-linking agent, the granulate mixture thus prepared is melted in an extruder and extruded onto the electrical cable, and the extruded coating is cross-linked in the presence of water or steam,[] wherein said polyethylene granulate comprises a polyethylene homopolymer and a [polyethylene] copolymer of ethylene with an amount of acrylate between 10-35%, and wherein the [copolymer] acrylate content in the insulating coating on the cable is between 1 and 8% by weight.

5. (Amended) A method as claimed in claim 4, wherein the regranulate provided with a catalyst or a catalyst batch[,] is introduced into an [insulation] extruder, extruded onto the electrical cable, and the coating extruded onto the electrical cable is cross-linked in the presence of water or steam.

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6. (Amended) A method as claimed in claim 4, wherein the granular polyethylene homopolymer material alone is coated with the liquid cross-linking agent in a compounding system, melted, grafted, homogenized and subsequently regranulated, and the [regranulated] regranulate and a granular [polyethylene] copolymer [material] of ethylene with [a copolymer] an acrylate content of more than 30%, [which is cross-linked with] and a catalyst, are placed into an [insulation] extruder, where the mixture is melted, homogenized and extruded onto the electrical cable and cross-linked.

7. (Amended) A method as claimed in claim 1, wherein the polyethylene copolymer used is an ethylene butyl acrylate (EBA), an ethylene ethyl acrylate (EEA) or an ethylene methyl acrylate (EMA), each with [a copolymer] an acrylate content of 10% - 35%.

8. (Amended) A method as claimed in claim 1, wherein a granular material of polyethylene homopolymer and [polyethylene] copolymer of ethylene is placed into an [insulation] extruder, a liquid mixture of silane, peroxide and possibly a stabilizer as well as a catalyst or a highly concentrated catalyst batch is likewise placed into the [insulation] extruder, and the mixture is melted, grafted and homogenized in the [insulation] extruder, and the grafted, homogenized material is extruded onto the electrical cable and cross-linked in the presence of water or steam.